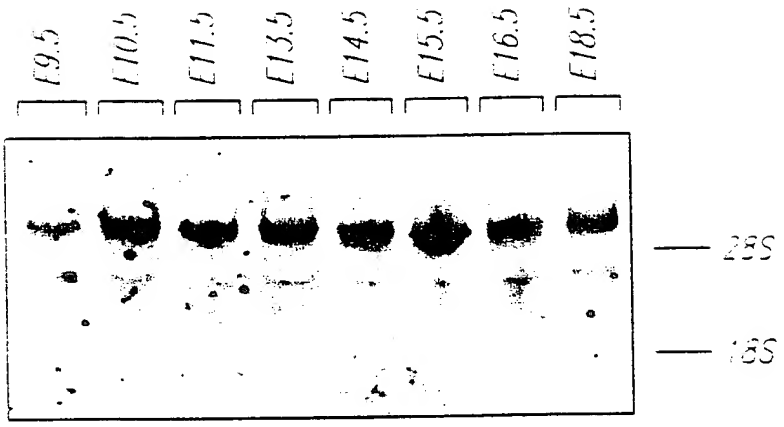
FIG. 1

```
FLK-1  866  ILIHIGHHLNVVNLLGACTKPGGPLMVIVEFSKFGNLSTYLRGKRNEFVPYKSKGARFRQ
KDR         --------------------------------C--D-------S---------T-------
TKR-C       --------------------------------C-------------------------S

FLK-1  926  GKDYVGELSVDLKRRLDSITSSQSSASSGFVEEKSLSDVEEEEASEELYKDFLTLEHLIC
KDR         ------AIP-----------------------------------P-D-------------
TKR-C       ------------------------------------------------------------

FLK-1  986  YSFQVAKGMEFLASRKCIHRDLAARNILLSEKNVVKICDFGLARDIYKDPDYVRKGDARL
KDR         ------------------------------------------------------------
TKR-C       ------------------------------------------------------------
```

FIG. 2A


E9.5
E10.5
E11.5
E13.5
E14.5
E15.5
E16.5
E18.5
28S
18S

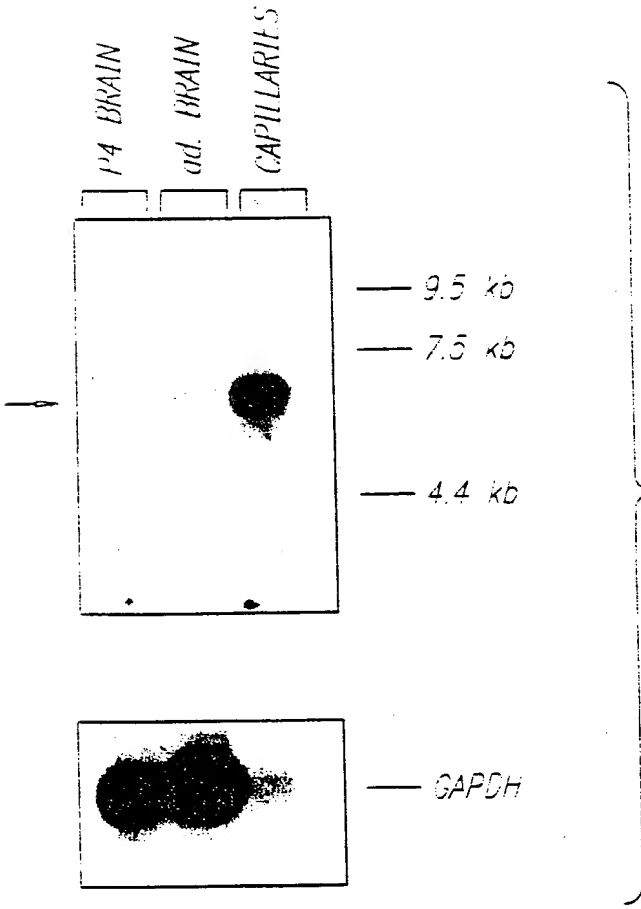

P4 BRAIN
ad. BRAIN
CAPILLARIES
9.5 kb
7.5 kb
4.4 kb
GAPDH

FIG. 2B

FIG. 3A

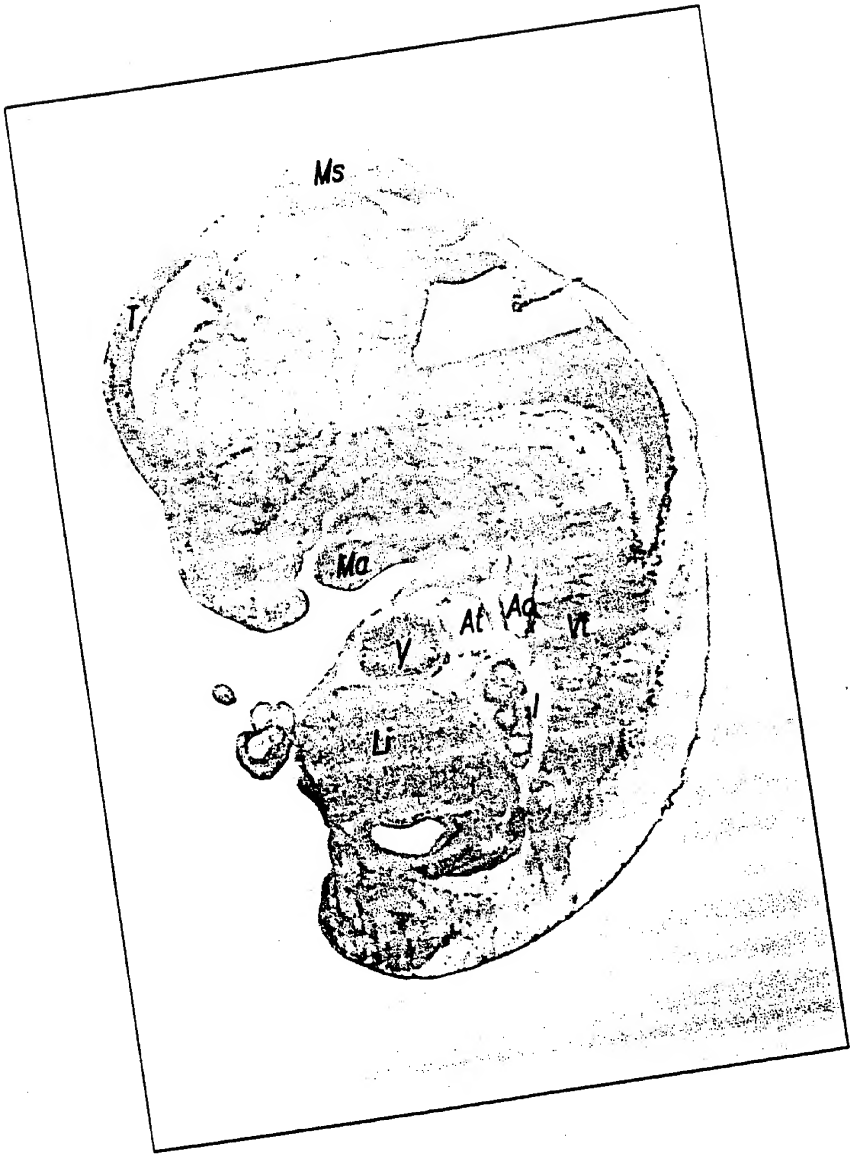


FIG. 3B

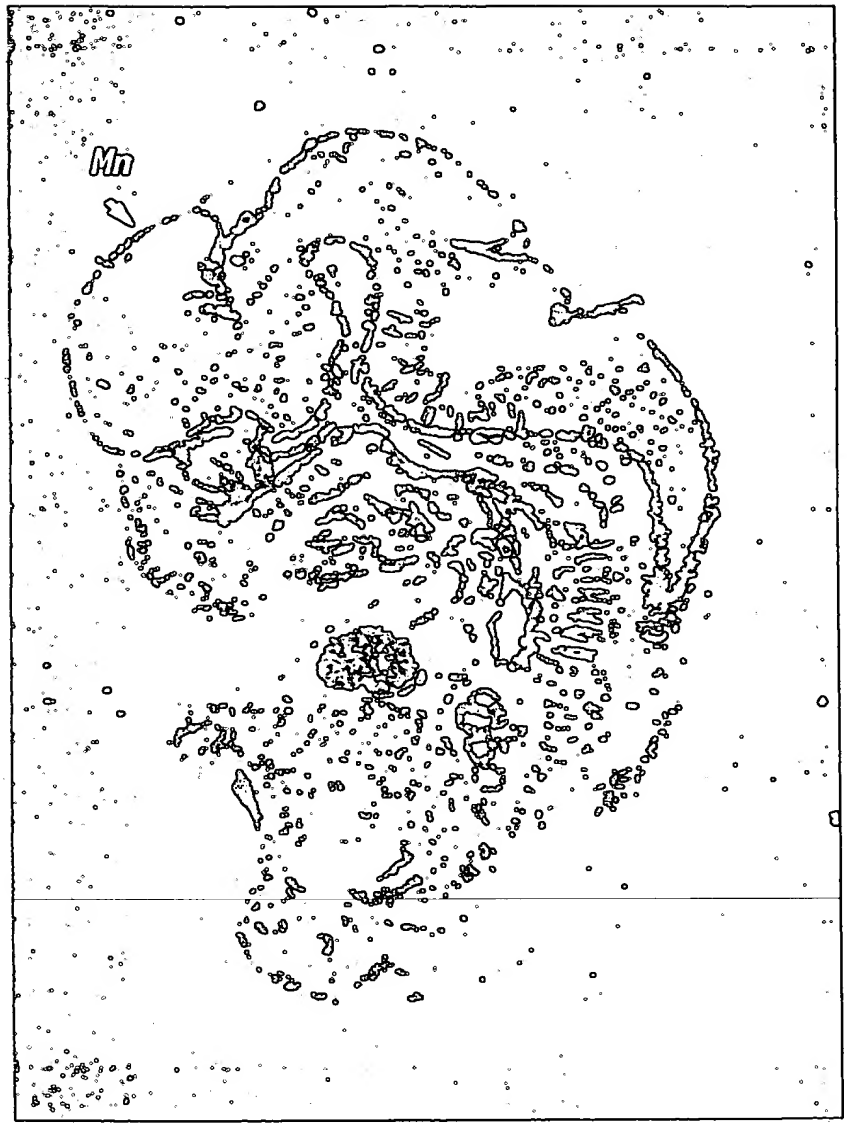


FIG. 3C

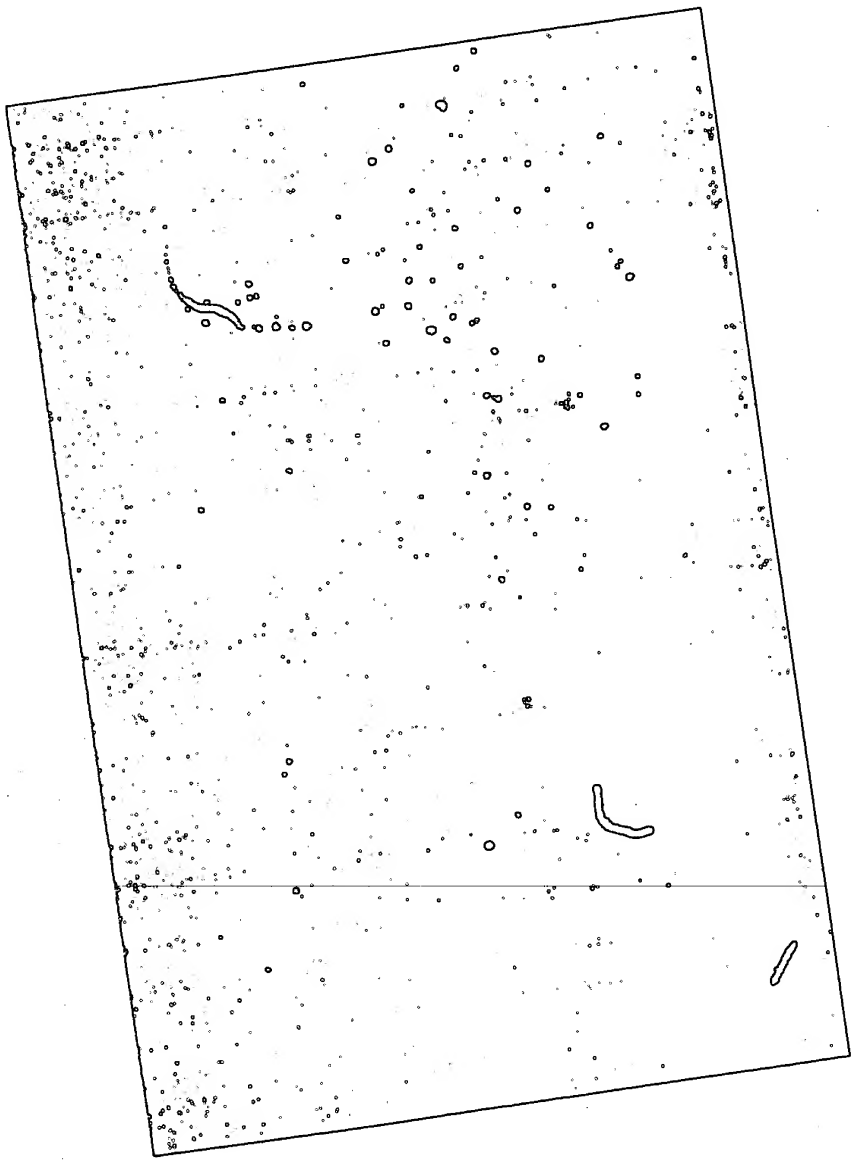
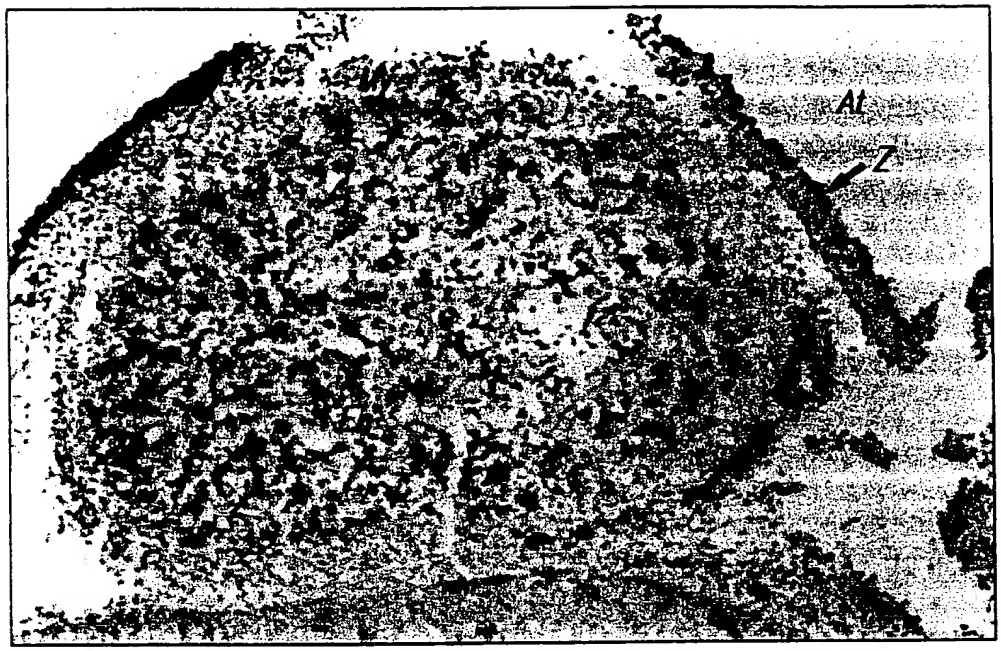


FIG. 4A



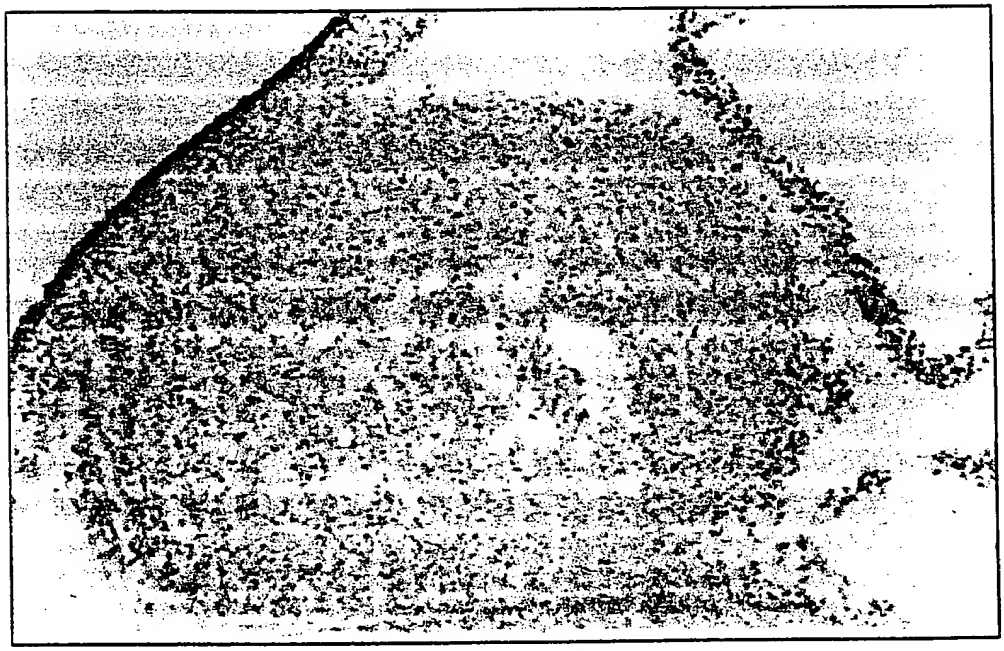


FIG. 4B

FIG. 4C

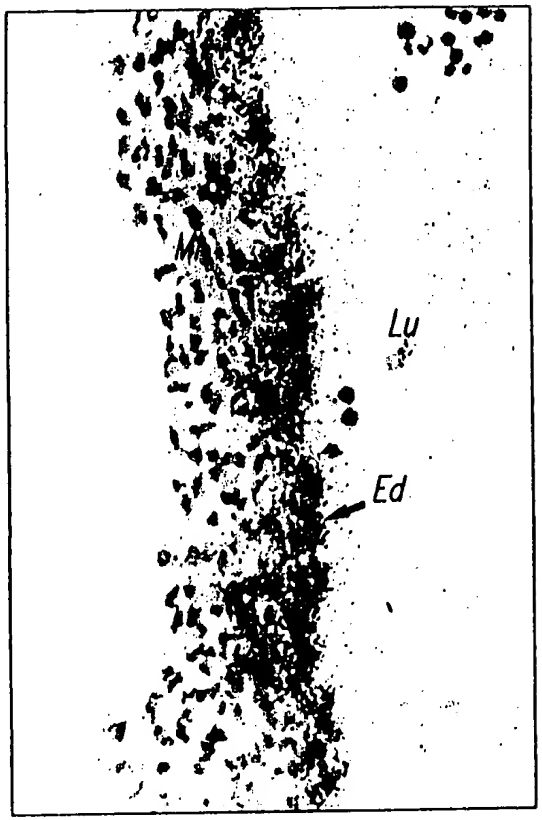


FIG. 4D

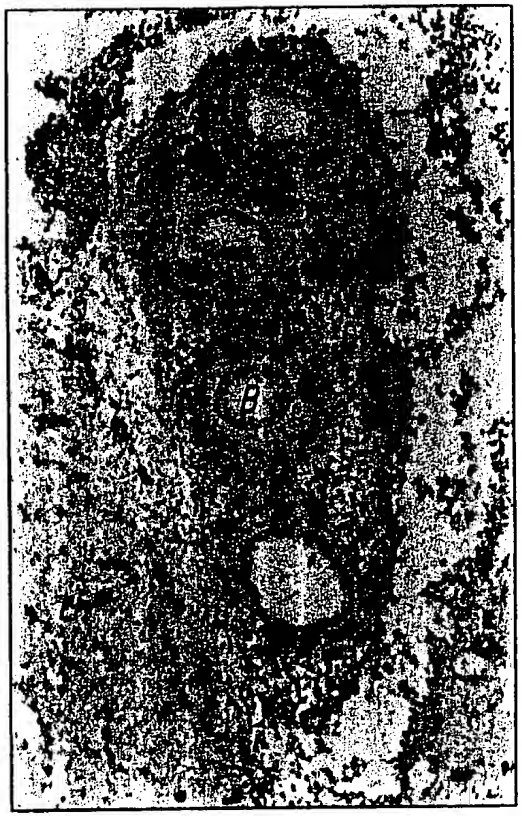


FIG. 4E

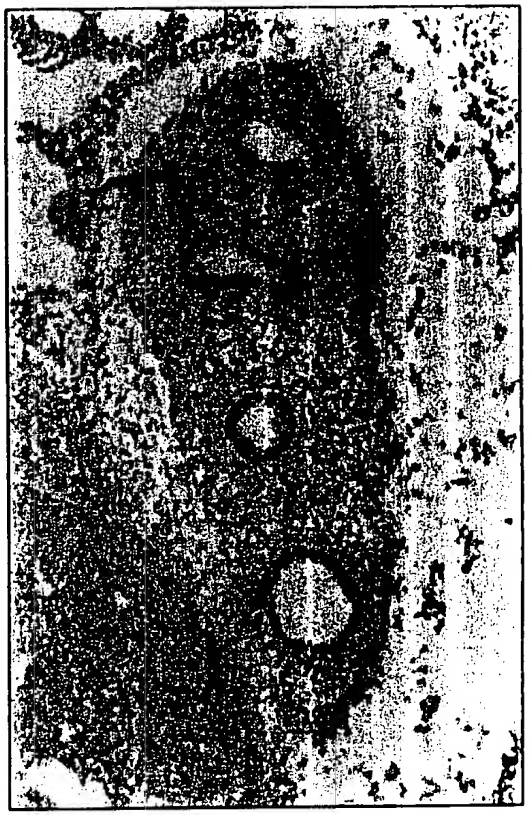
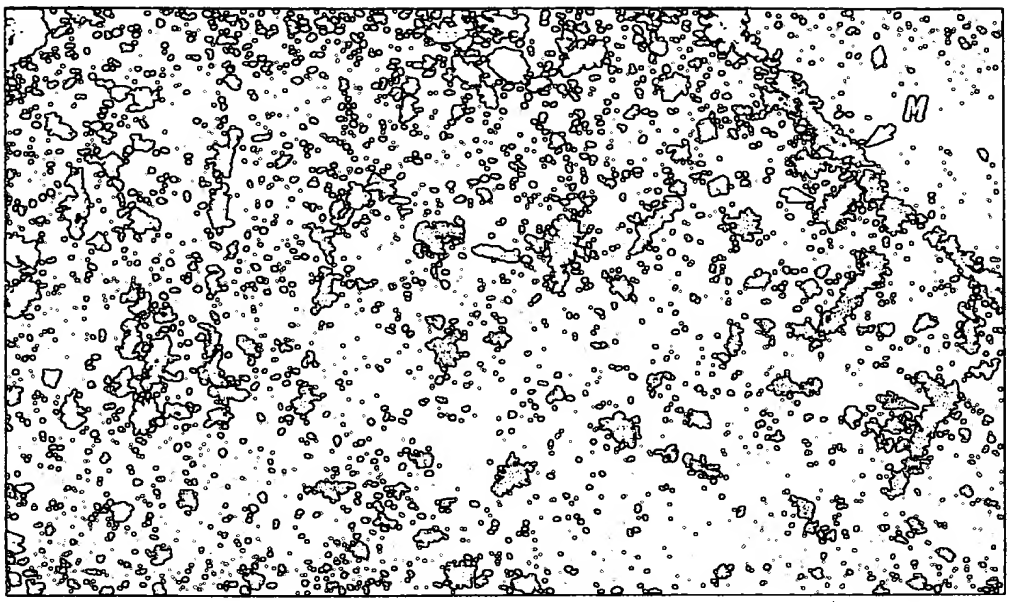


FIG. 5A

FIG. 5B

FIG. 5C



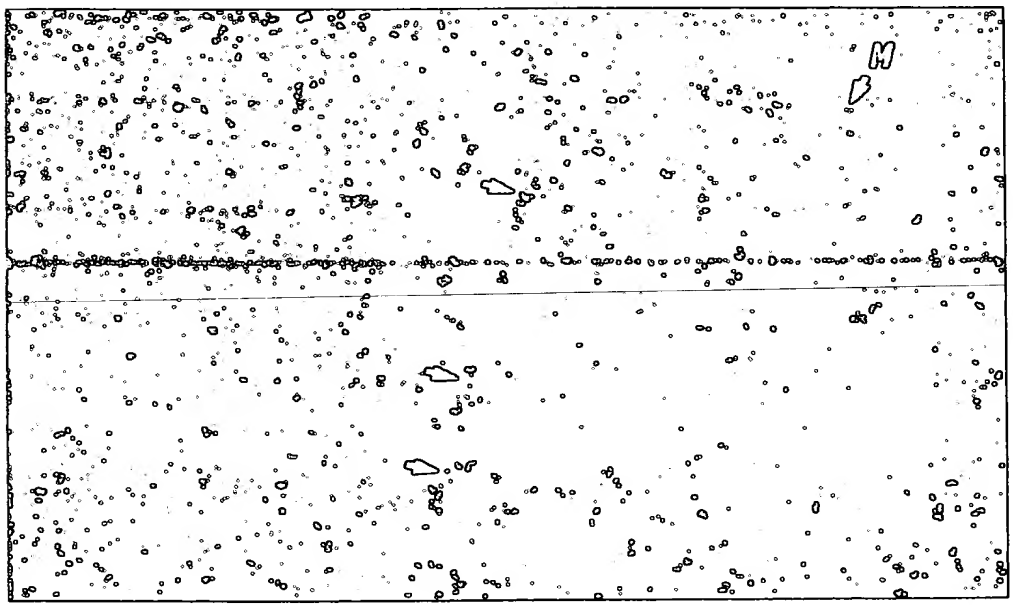
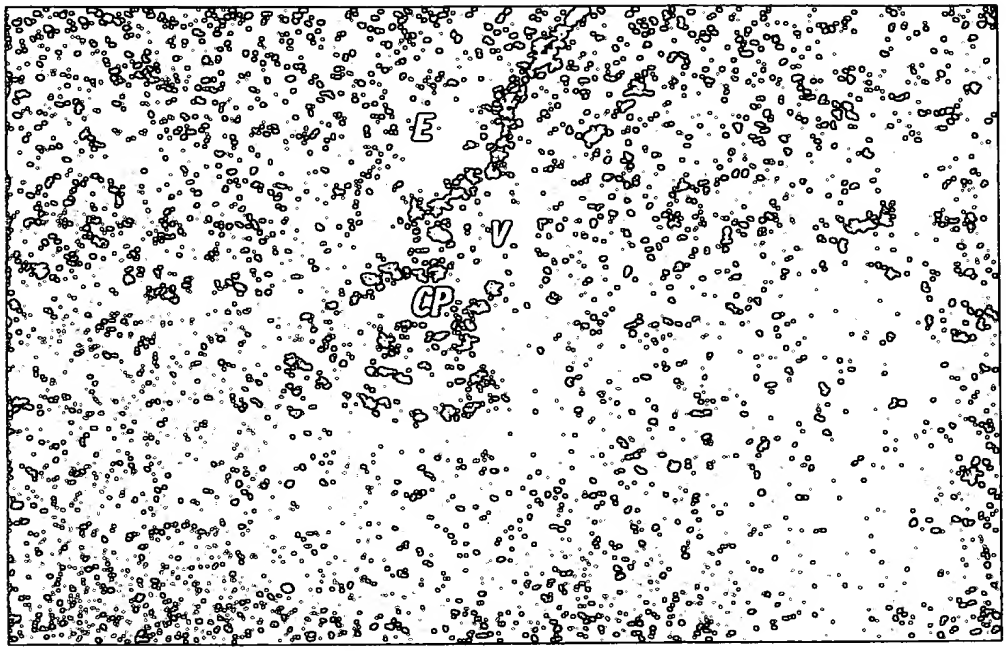


FIG. 5D

FIG. 6A



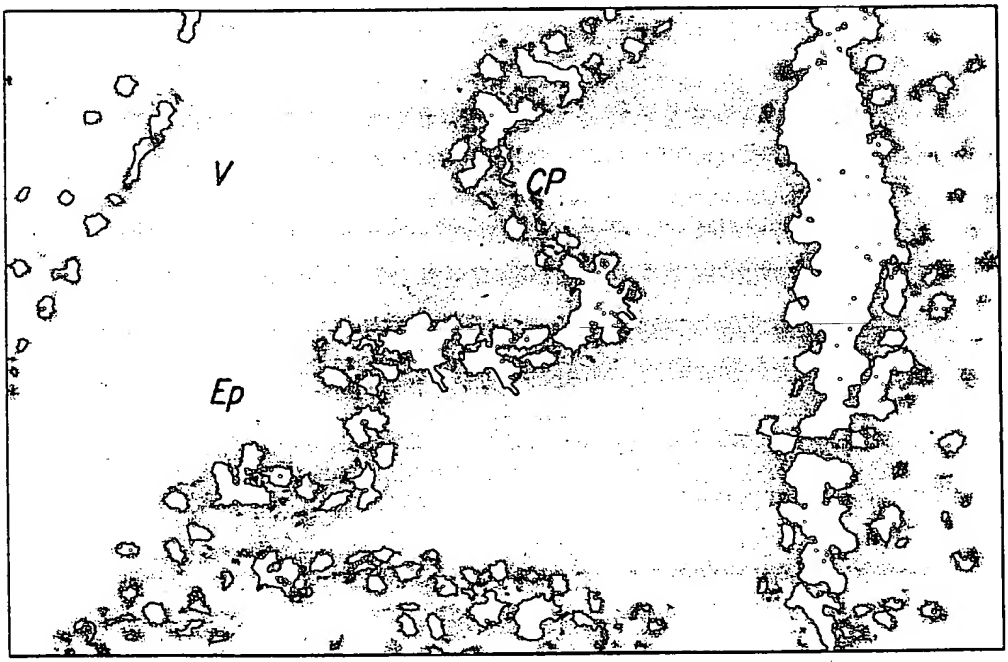


FIG. 6B

FIG. 7A

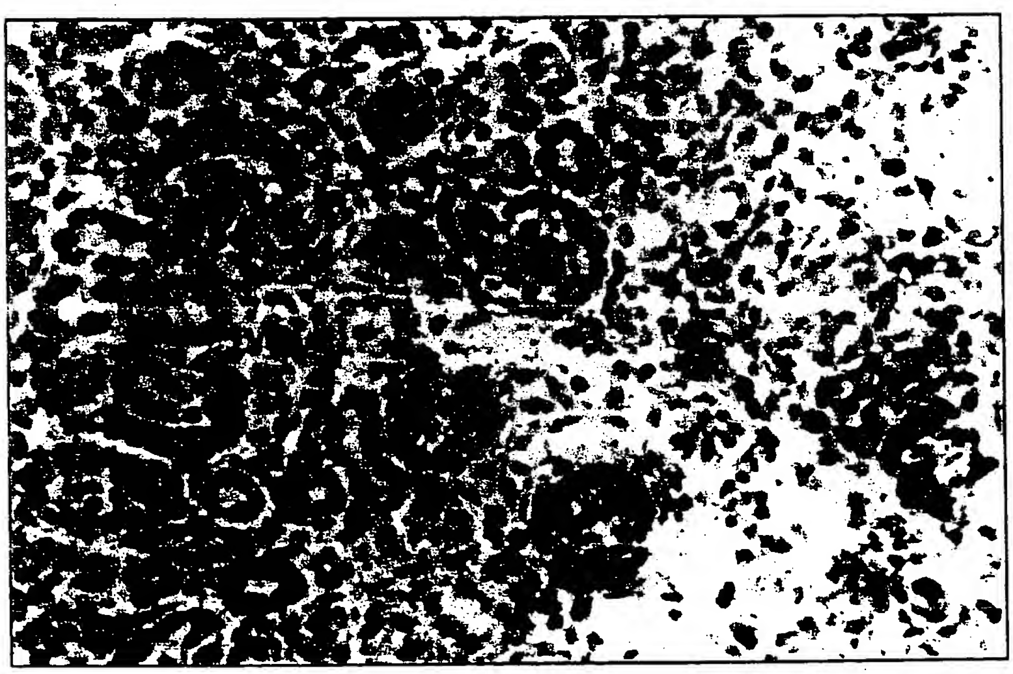


FIG. 7B

FIG. 7C

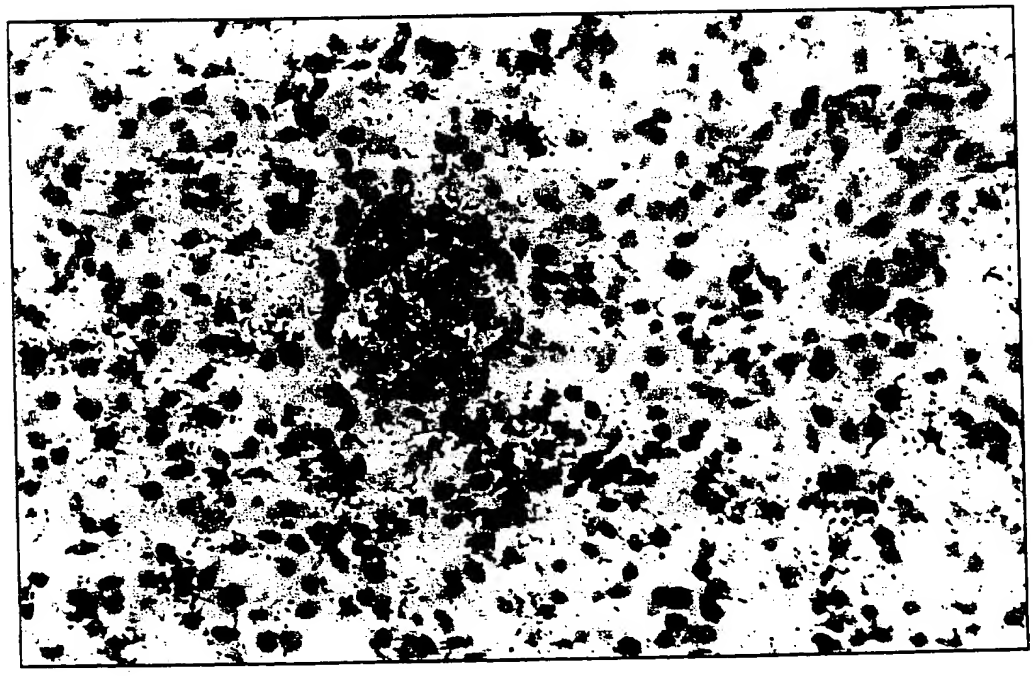


FIG. 7D

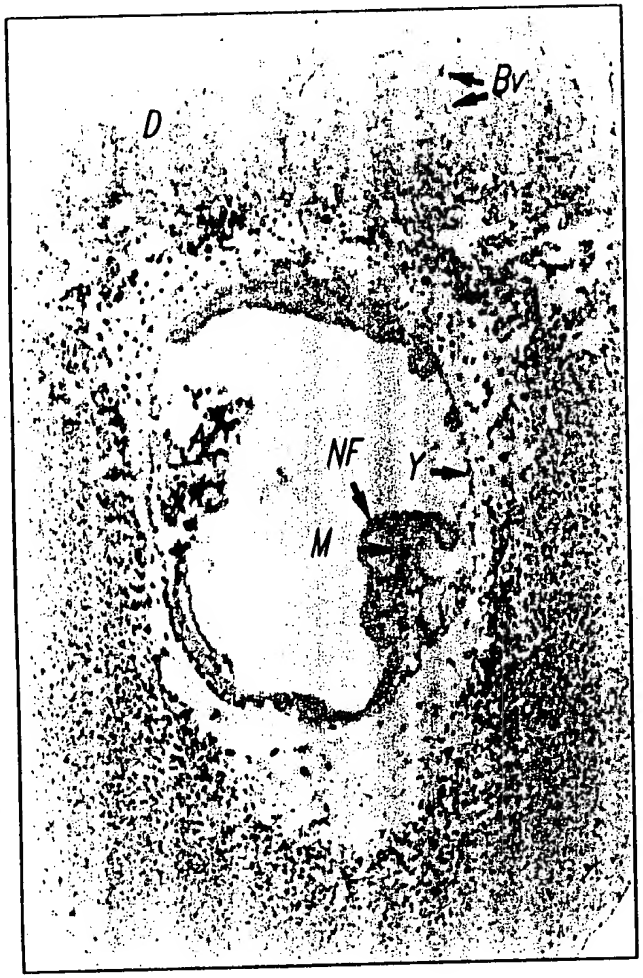


FIG. 8A

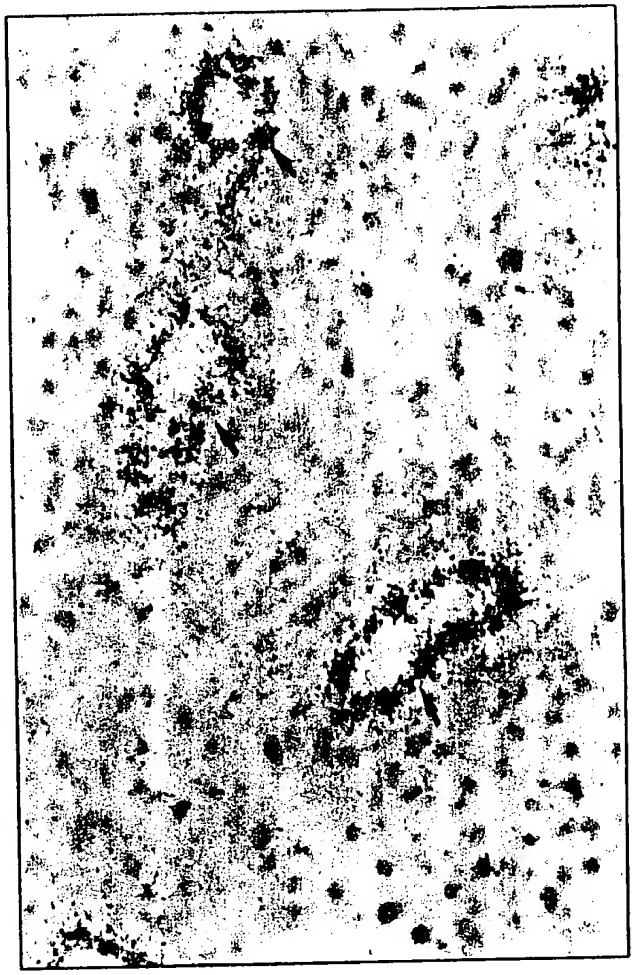


FIG. 8B

FIG. 8C

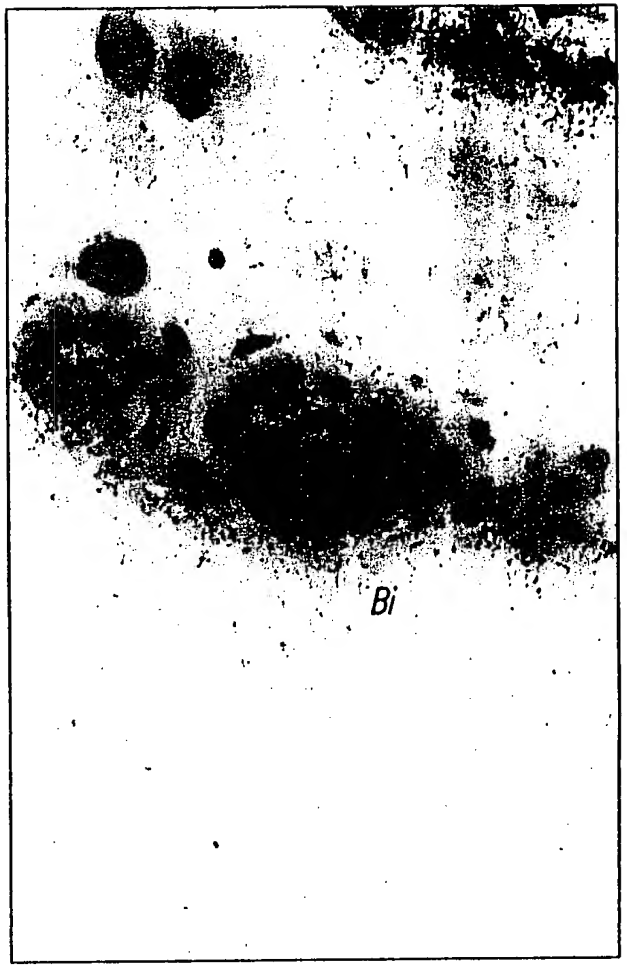


FIG. 8D

FIG. 9A

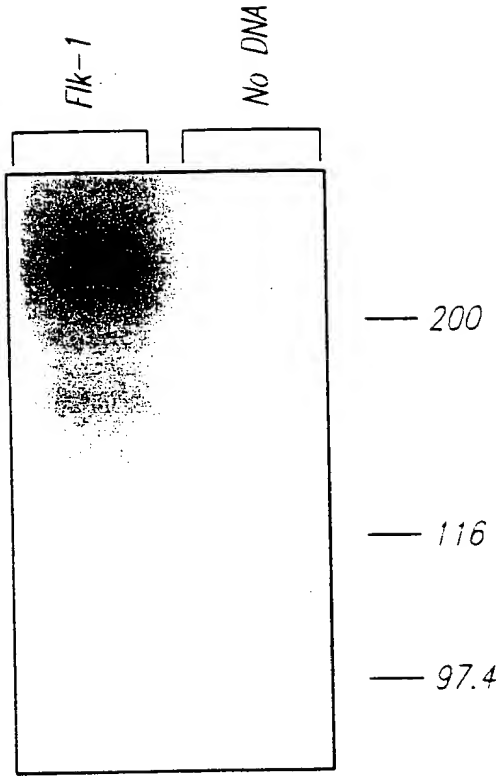


FIG. 10

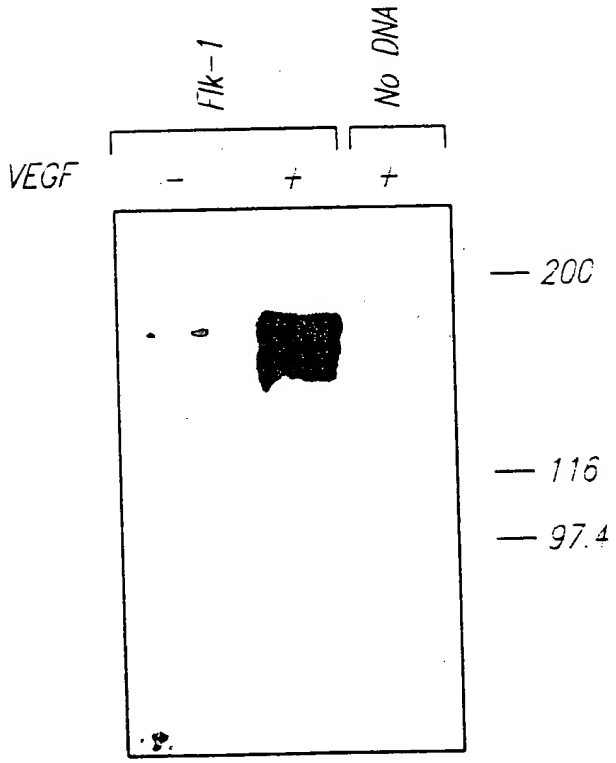


FIG. 11-1

```
CTGTGTCCCGCAGCCGGGATAACCTGGCTGACCCGATTCCGCGGACACCGCTGACAGCCGCGGCTGGAGCCAGGG   75
CGCCGGTGCCCCGCGCTCTCCCCGGTCTTGCGCTGCGGGGGCCATACCGCCTCTGTGACTTCTTTGCGGGCCAGG  150
GACGGAGAAGGAGTCTGTGCCTGAGAAACTGGGCTCTGTGCCCAGGCGCGAGGTGCAGGATGGAGAGCAAGGCGC  225
                                                          M  E  S  K  A  L

TGCTAGCTGTCGCTCTGTGGTTCTGCGTGGAGACCCGAGCCGCCTCTGTGGGTTTGACTGGCGATTTTCTCCATC  300
 L  A  V  A  L  W  F  C  V  E  T  R  A  A  S  V  G  L  T  G  D  F  L  H  P

CCCCCAAGCTCAGCACACAGAAAGACATACTGACAATTTTGGCAAATACAACCCTTCAGATTACTTGCAGGGGAC  375
 P  K  L  S  T  Q  K  D  I  L  T  I  L  A  N  T  T  L  Q  I  T  C  R  G  Q

AGCGGGACCTGGACTGGCTTTGGCCCAATGCTCAGCGTGATTCTGAGGAAAGGGTATTGGTGACTGAATGCGGCG  450
 R  D  L  D  W  L  W  P  N  A  Q  R  D  S  E  E  R  V  L  V  T  E  C  G  G

GTGGTGACAGTATCTTCTGCAAAACACTCACCATTCCCAGGGTGGTTGGAAATGATACTGGAGCCTACAAGTGCT  525
 G  D  S  I  F  C  K  T  L  T  I  P  R  V  V  G  N  D  T  G  A  Y  K  C  S

CGTACCGGGACGTCGACATAGCCTCCACTGTTTATGTCTATGTTCGAGATTACAGATCACCATTCATCGCCTCTG  600
 Y  R  D  V  D  I  A  S  T  V  Y  V  Y  V  R  D  Y  R  S  P  F  I  A  S  V

TCAGTGACCAGCATGGCATCGTGTACATCACCGAGAACAAGAACAAAACTGTGGTGATCCCCTGCCGAGGGTCGA  675
 S  D  Q  H  G  I  V  Y  I  T  E  N  K  N  K  T  V  V  I  P  C  R  G  S  I

TTTCAAACCTCAATGTGTCTCTTTGCGCTAGGTATCCAGAAAAGAGATTTGTTCCGGATGGAAACAGAATTTCCT  750
 S  N  L  N  V  S  L  C  A  R  Y  P  E  K  R  F  V  P  D  G  N  R  I  S  W

GGGACAGCGAGATAGGCTTTACTCTCCCCAGTTACATGATCAGCTATGCCGGCATGGTCTTCTGTGAGGCAAAGA  825
 D  S  E  I  G  F  T  L  P  S  Y  M  I  S  Y  A  G  M  V  F  C  E  A  K  I

TCAATGATGAAACCTATCAGTCTATCATGTACATAGTTGTGGTTGTAGGATATAGGATTTATGATGTGATTCTGA  900
 N  D  E  T  Y  Q  S  I  M  Y  I  V  V  V  V  G  Y  R  I  Y  D  V  I  L  S

GCCCCCCGCATGAAATTGAGCTATCTGCCGGAGAAAAACTTGTCTTAAATTGTACAGCGAGAACAGAGCTCAATG  975
 P  P  H  E  I  E  L  S  A  G  E  K  L  V  L  N  C  T  A  R  T  E  L  N  V

TGGGGCTTGATTTCACCTGGCACTCTCCACCTTCAAAGTCTCATCATAAGAAGATTGTAAACCGGGATGTGAAAC 1050
 G  L  D  F  T  W  H  S  P  P  S  K  S  H  H  K  K  I  V  N  R  D  V  K  P

CCTTTCCTGGGACTGTGGCGAAGATGTTTTTGAGCACCTTGACAATAGAAAGTGTGACCAAGAGTGACCAAGGGG 1125
 F  P  G  T  V  A  K  M  F  L  S  T  L  T  I  E  S  V  T  K  S  D  Q  G  E

AATACACCTGTGTAGCGTCCAGTGGACGGATGATCAAGAGAAATAGAACATTTGTCCGAGTTCACACAAAGCCTT 1200
 Y  T  C  V  A  S  S  G  R  M  I  K  R  N  R  T  F  V  R  V  H  T  K  P  F

TTATTGCTTTCGGTAGTGGGATGAAATCTTTGGTGGAAGCCACAGTGGGCAGTCAAGTCCGAATCCCTGTGAAGT 1275
 I  A  F  G  S  G  M  K  S  L  V  E  A  T  V  G  S  Q  V  R  I  P  V  K  Y

ATCTCAGTTACCCAGCTCCTGATATCAAATGGTACAGAAATGGAAGGCCCATTGAGTCCAACTACACAATGATTG 1350
 L  S  Y  P  A  P  D  I  K  W  Y  R  N  G  R  P  I  E  S  N  Y  T  M  I  V
```

FIG. 11-2

```
TTGGCGATGAACTCACCATCATGGAAGTGACTGAAAGAGATGCAGGAAACTACACGGTCATCCTCACCAACCCCA 1425
  G  D  E  L  T  I  M  E  V  T  E  R  D  A  G  N  Y  T  V  I  L  T  N  P  I

TTTCAATGGAGAAACAGAGCCACATGGTCTCTCTGGTTGTGAATGTCCCACCCCAGATCGGTGAGAAAGCCTTGA 1500
  S  M  E  K  Q  S  H  M  V  S  L  V  V  N  V  P  P  Q  I  G  E  K  A  L  I

TCTCGCCTATGGATTCCTACCAGTATGGGACCATGCAGACATTGACATGCACAGTCTACGCCAACCCTCCCCTGC 1575
  S  P  M  D  S  Y  Q  Y  G  T  M  Q  T  L  T  C  T  V  Y  A  N  P  P  L  H

ACCACATCCAGTGGTACTGGCAGCTAGAAGAAGCCTGCTCCTACAGACCCGGCCAAACAAGCCCGTATGCTTGTA 1650
  H  I  Q  W  Y  W  Q  L  E  E  A  C  S  Y  R  P  G  Q  T  S  P  Y  A  C  K

AAGAATGGAGACACGTGGAGGATTTCCAGGGGGGAAACAAGATCGAAGTCACCAAAAACCAATATGCCCTGATTG 1725
  E  W  R  H  V  E  D  F  Q  G  G  N  K  I  E  V  T  K  N  Q  Y  A  L  I  E

AAGGAAAAAACAAAACTGTAAGTACGCTGGTCATCCAAGCTGCCAACGTGTCAGCGTTGTACAAATGTGAAGCCA 1800
  G  K  N  K  T  V  S  T  L  V  I  Q  A  A  N  V  S  A  L  Y  K  C  E  A  I

TCAACAAAGCGGGACGAGGAGAGAGGGTCATCTCCTTCCATGTGATCAGGGGTCCTGAAATTACTGTGCAACCTG 1875
  N  K  A  G  R  G  E  R  V  I  S  F  H  V  I  R  G  P  E  I  T  V  Q  P  A

CTGCCCAGCCAACTGAGCAGGAGAGTGTGTCCCTGTTGTGCACTGCAGACAGAAATACGTTTGAGAACCTCACGT 1950
  A  Q  P  T  E  Q  E  S  V  S  L  L  C  T  A  D  R  N  T  F  E  N  L  T  W

GGTACAAGCTTGGCTCACAGGCAACATCGGTCCACATGGGCGAATCACTCACACCAGTTTGCAAGAACTTGGATG 2025
  Y  K  L  G  S  Q  A  T  S  V  H  M  G  E  S  L  T  P  V  C  K  N  L  D  A

CTCTTTGGAAACTGAATGGCACCATGTTTTCTAACAGCACAAATGACATCTTGATTGTGGCATTTCAGAATGCCT 2100
  L  W  K  L  N  G  T  M  F  S  N  S  T  N  D  I  L  I  V  A  F  Q  N  A  S

CTCTGCAGGACCAAGGCGACTATGTTTGCTCTGCTCAAGATAAGAAGACCAAGAAAAGACATTGCCTGGTCAAAC 2175
  L  Q  D  Q  G  D  Y  V  C  S  A  Q  D  K  K  T  K  K  R  H  C  L  V  K  Q

AGCTCATCATCCTAGAGCGCATGGCACCCATGATCACCGGAAATCTGGAGAATCAGACAACAACCATTGGCGAGA 2250
  L  I  I  L  E  R  M  A  P  M  I  T  G  N  L  E  N  Q  T  T  T  I  G  E  T

CCATTGAAGTGACTTGCCCAGCATCTGGAAATCCTACCCCACACATTACATGGTTCAAAGACAACGAGACCCTGG 2325
  I  E  V  T  C  P  A  S  G  N  P  T  P  H  I  T  W  F  K  D  N  E  T  L  V

TAGAAGATTCAGGCATTGTACTGAGAGATGGGAACCGGAACCTGACTATCCGCAGGGTGAGGAAGGAGGATGGAG 2400
  E  D  S  G  I  V  L  R  D  G  N  R  N  L  T  I  R  R  V  R  K  E  D  G  G

GCCTCTACACCTGCCAGGCCTGCAATGTCCTTGGCTGTGCAAGAGCGGAGACGCTCTTCATAATAGAAGGTGCCC 2575
  L  Y  T  C  Q  A  C  N  V  L  G  C  A  R  A  E  T  L  F  I  I  E  G  A  Q

AGGAAAAGACCAACTTGGAAGTCATTATCCTCGTCGGCACTGCAGTGATTGCCATGTTCTTCTGGCTCCTTCTTG 2550
  E  K  T  N  L  E  V  I  I  L  V  G  T  A  V  I  A  M  F  F  W  L  L  L  V

TCATTGTCCTACGGACCGTTAAGCGGGCCAATGAAGGGGAACTGAAGACAGGCTACTTGTCTATTGTCATGGATC 2625
  I  V  L  R  T  V  K  R  A  N  E  G  E  L  K  T  G  Y  L  S  I  V  M  D  P
```

FIG. 11-3

```
CAGATGAATTGCCCTTGGATGAGCGCTGTGAACGCTTGCCTTATGATGCCAGCAAGTGGGAATTCCCCAGGGACC 2700
  D  E  L  P  L  D  E  R  C  E  R  L  P  Y  D  A  S  K  W  E  F  P  R  D  R

GGCTGAAACTAGGAAAACCTCTTGGCCGCGGTGCCTTCGGCCAAGTGATTGAGGCAGACGCTTTTGGAATTGACA 2775
  L  K  L  G  K  P  L  G  R  G  A  F  G  Q  V  I  E  A  D  A  F  G  I  D  K

AGACAGCGACTTGCAAAACAGTAGCCGTCAAGATGTTGAAAGAAGGAGCAACACACAGCGAGCATCGAGCCCTCA 2850
  T  A  T  C  K  T  V  A  V  K  M  L  K  E  G  A  T  H  S  E  H  R  A  L  M

TGTCTGAACTCAAGATCCTCATCCACATTGGTCACCATCTCAATGTGGTGAACCTCCTAGGCGCCTGCACCAAGC 2925
  S  E  L  K  I  L  I  H  I  G  H  H  L  N  V  V  N  L  L  G  A  C  T  K  P

CGGGAGGGCCTCTCATGGTGATTCTGCAATTCTCGAAGTTTGGAAACCTATCAACTTACTTACGGGGCAAGAGAA 3000
  G  G  P  L  M  V  I  L  Q  F  S  K  F  G  N  L  S  T  Y  L  R  G  K  R  N

ATGAATTTGTTCCCTATAAGAGCAAAGGGGCACGCTTCCGCCAGGGCAAGGACTACGTTGGGGAGCTCTCCGTGG 3075
  E  F  V  P  Y  K  S  K  G  A  R  F  R  Q  G  K  D  Y  V  G  E  L  S  V  D

ATCTGAAAAGACGCTTGGACAGCATCACCAGCAGCCAGAGCTCTGCCAGCTCAGGCTTTGTTGAGGAGAAATCGC 3150
  L  K  R  R  L  D  S  I  T  S  S  Q  S  S  A  S  S  G  F  V  E  E  K  S  L

TCAGTGATGTAGAGGAAGAAGAAGCTTCTGAAGAACTGTACAAGGACTTCCTGACCTTGGAGCATCTCATCTGTT 3225
  S  D  V  E  E  E  E  E  A  S  E  E  L  Y  K  D  F  L  T  L  E  H  L  I  C  Y

ACAGCTTCCAAGTGGCTAAGGGCATGGAGTTCTTGGCATCAAGGAAGTGTATCCACAGGGACCTGGCAGCACGAA 3300
  S  F  Q  V  A  K  G  M  E  F  L  A  S  R  K  C  I  H  R  D  L  A  A  R  N

ACATTCTCCTATCGGAGAAGAATGTGGTTAAGATCTGTGACTTCGGCTTGGCCCGGGACATTTATAAAGACCCGG 3375
  I  L  L  S  E  K  N  V  V  K  I  C  D  F  G  L  A  R  D  I  Y  K  D  P  D

ATTATGTCAGAAAAGGAGATGCCCGACTCCCTTTGAAGTGGATGGCCCCGGAAACCATTTTTGACAGAGTATACA 3450
  Y  V  R  K  G  D  A  R  L  P  L  K  W  M  A  P  E  T  I  F  D  R  V  Y  T

CAATTCAGAGCGATGTGTGGTCTTTCGGTGTGTTGCTCTGGGAAATATTTTCCTTAGGTGCCTCCCCATACCCTG 3525
  I  Q  S  D  V  W  S  F  G  V  L  L  W  E  I  F  S  L  G  A  S  P  Y  P  G

GGGTCAAGATTGATGAAGAATTTTGTAGGAGATTGAAAGAAGGAACTAGAATGCGGGCTCCTGACTACACTACCC 3600
  V  K  I  D  E  E  F  C  R  R  L  K  E  G  T  R  M  R  A  P  D  Y  T  T  P

CAGAAATGTACCAGACCATGCTGGACTGCTGGCATGAGGACCCCAACCAGAGACCCTCGTTTTCAGAGTTGGTGG 3675
  E  M  Y  Q  T  M  L  D  C  W  H  E  D  P  N  Q  R  P  S  F  S  E  L  V  E

AGCATTTGGGAAACCTCCTGCAAGCAAATGCGCAGCAGGATGGCAAAGACTATATTGTTCTTCCAATGTCAGAGA 3750
  H  L  G  N  L  L  Q  A  N  A  Q  Q  D  G  K  D  Y  I  V  L  P  M  S  E  T

CACTGAGCATGGAAGAGGATTCTGGACTCTCCCTGCCTACCTCACCTGTTTCCTGTATGGAGGAAGAGGAAGTGT 3825
  L  S  M  E  E  D  S  G  L  S  L  P  T  S  P  V  S  C  M  E  E  E  E  V  C

GCGACCCCAAATTCCATTATGACAACACAGCAGGAATCAGTCATTATCTCCAGAACAGTAAGCGAAAGAGCCGGC 3900
  D  P  K  F  H  Y  D  N  T  A  G  I  S  H  Y  L  Q  N  S  K  R  K  S  R  P
```

FIG. 11-4

```
CAGTGAGTGTAAAAACATTTGAAGATATCCCATTGGAGGAACCAGAAGTAAAAGTGATCCCAGATGACAGCCAGA 3975
  V  S  V  K  T  F  E  D  I  P  L  E  E  P  E  V  K  V  I  P  D  D  S  Q  T

CAGACAGTGGGATGGTCCTTGCATCAGAAGAGCTGAAAACTCTGGAAGACAGGAACAAATTATCTCCATCTTTTG 4050
  D  S  G  M  V  L  A  S  E  E  L  K  T  L  E  D  R  N  K  L  S  P  S  F  G

GTGGAATGATGCCCAGTAAAAGCAGGGAGTCTGTGGCCTCGGAAGGCTCCAACCAGACCAGTGGCTACCAGTCTG 4125
  G  M  M  P  S  K  S  R  E  S  V  A  S  E  G  S  N  Q  T  S  G  Y  Q  S  G

GGTATCACTCAGATGACACAGACACCACCGTGTACTCCAGCGACGAGGCAGGACTTTTAAAGATGGTGGATGCTG 4200
  Y  H  S  D  D  T  D  T  T  V  Y  S  S  D  E  A  G  L  L  K  M  V  D  A  A

CAGTTCACGCTGACTCAGGGACCACACTGAGCTCACCTCCTGTTTAAATGGAAGTGGTCCTGTCCCGGCTCCGCC 4275
  V  H  A  D  S  G  T  T  L  S  S  P  P  V

CCCAACTCCTGGAAATCACGAGAGAGGTGCTGCTTAGATTTTCAAGTGTTGTTCTTTCCACCACCCGGAAGTAGC 4350
CACATTTGATTTTCATTTTTGGAGGAGGGACCTCAGACTGCAAGGAGCTTGTCCTCAGGGCATTTCCAGAGAAGA 4425
TGCCCATGACCCAAGAATGTGTTGACTCTACTCTCTTTTCCATTCATTTAAAAGTCCTATATAATGTGCCCTGCT 4500
GTGGTCTCACTACCAGTTAAAGCAAAAGACTTTCAAACACGTGGACTCTGTCCTCCAAGAAGTGGCAACGGCACC 4575
TCTGTGAAACTGGATCGAATGGGCAATGCTTTGTGTGTTGAGGATGGGTGAGATGTCCCAGGGCCGAGTCTGTCT 4650
ACCTTGGAGGCTTTGTGGAGGATGCGGGCTATGAGCCAAGTGTTAAGTGTGGGATGTGGACTGGGAGGAAGGAAG 4725
GCGCAAGCCGTCCGGAGAGCGGTTGGAGCCTGCAGATGCATTGTGCTGGCTCTGGTGGAGGTGGGCTTGTGGCCT 4800
GTCAGGAAACGCAAAGGCGGCCGGCAGGGTTTGGTTTTGGAAGGTTTGCGTGCTCTTCACAGTCGGGTTACAGGC 4875
GAGTTCCCTGTGGCGTTTCCTACTCCTAATGAGAGTTCCTTCCGGACTCTTACGTGTCTCCTGGCCTGGCCCCAG 4950
GAAGGAAATGATGCAGCTTGCTCCTTCCTCATCTCTCAGGCTGTGCCTTAATTCAGAACACCAAAAGAGAGGAAC 5025
GTCGGCAGAGGCTCCTGACGGGGCCGAAGAATTGTGAGAACAGAACAGAAACTCAGGGTTTCTGCTGGGTGGAGA 5100
CCCACGTGGCGCCCTGGTGGCAGGTCTGAGGGTTCTCTGTCAAGTGGCGGTAAAGGCTCAGGCTGGTGTTCTTCC 5175
TCTATCTCCACTCCTGTCAGGCCCCCAAGTCCTCAGTATTTTAGCTTTGTGGCTTCCTGATGGCAGAAAAATCTT 5250
AATTGGTTGGTTTGCTCTCCAGATAATCACTAGCCAGATTTCGAAATTACTTTTTAGCCGAGGTTATGATAACAT 5325
CTACTGTATCCTTTAGAATTTTAACCTATAAAACTATGTCTACTGGTTTCTGCCTGTGTGCTTATGTT         5393
```

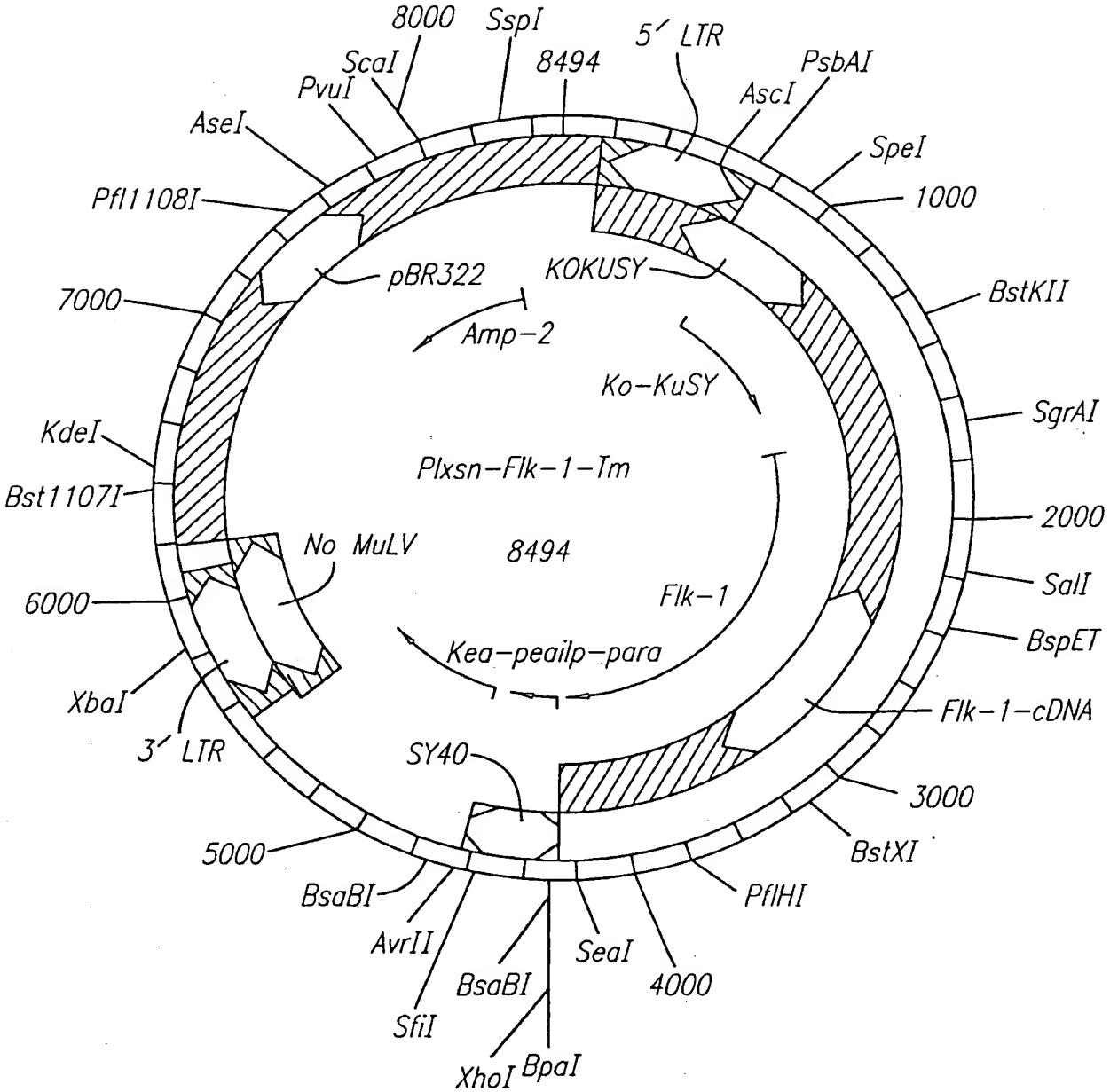

8000
SspI
5′ LTR
8494
ScaI
PsbAI
PvuI
AscI
AseI
SpeI
Pfl1108I
1000
pBR322
KOKUSY
7000
BstKII
Amp−2
Ko−KuSY
SgrAI
KdeI
Plxsn−Flk−1−Tm
Bst1107I
2000
No MuLV
8494
SalI
6000
Flk−1
BspET
Kea−peailp−para
XbaI
Flk−1−cDNA
3′ LTR
SY40
3000
5000
BstXI
BsaBI
PflHI
AvrII
SeaI
BsaBI
4000
SfiI
XhoI
BpaI

FIG. 12A

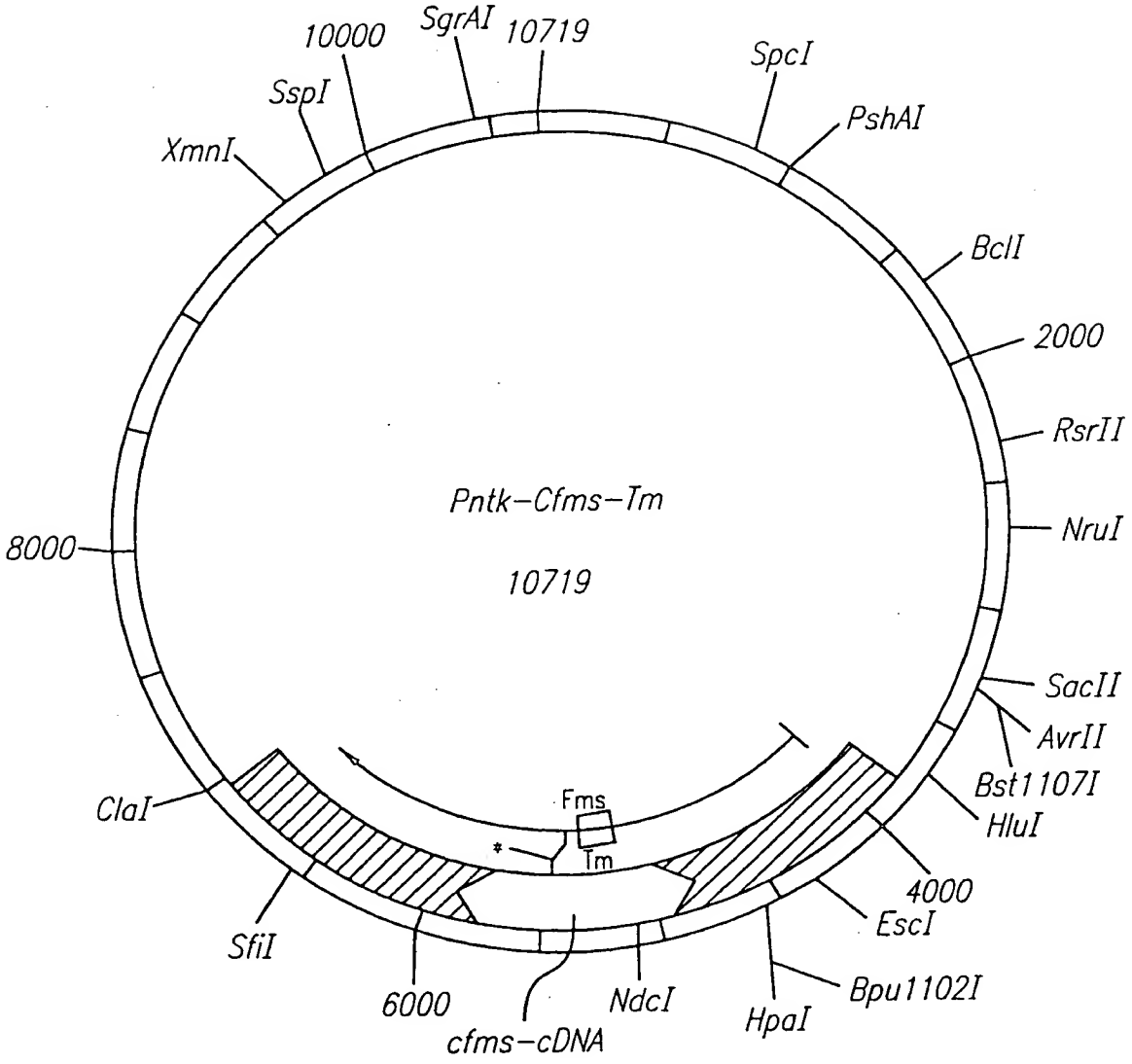
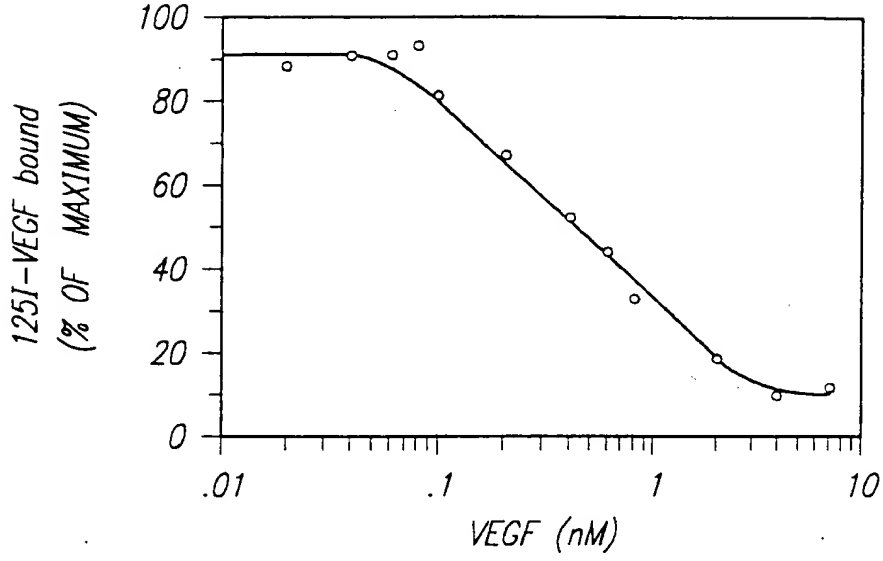

10000
SgrAI
10719
SspI
SpcI
XmnI
PshAI
BclI
2000
RsrII
Pntk–Cfms–Tm
10719
NruI
8000
SacII
AvrII
Bst1107I
HluI
ClaI
Fms
Tm
4000
EscI
SfiI
Bpu1102I
6000
NdcI
HpaI
cfms–cDNA

FIG. 12B

FIG. 9B


100
80
60
40
20
0
125I-VEGF bound
(% OF MAXIMUM)
.01
.1
1
10
VEGF (nM)

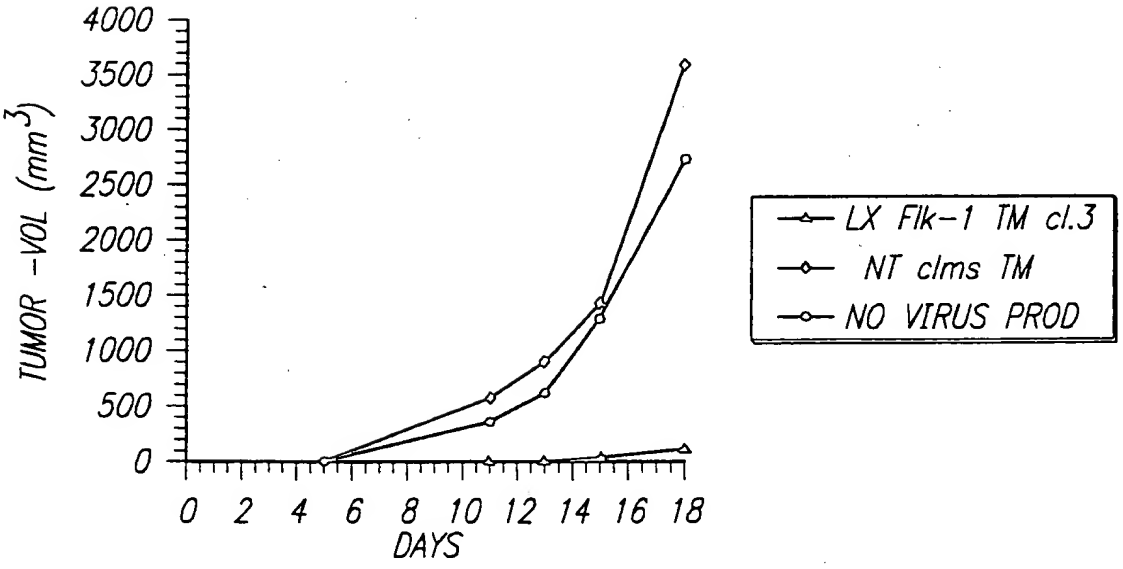

4000
3500
3000
2500
2000
1500
1000
500
0
TUMOR -VOL (mm3)
0 2 4 6 8 10 12 14 16 18
DAYS
LX Flk-1 TM cl.3
NT clms TM
NO VIRUS PROD

FIG. 13

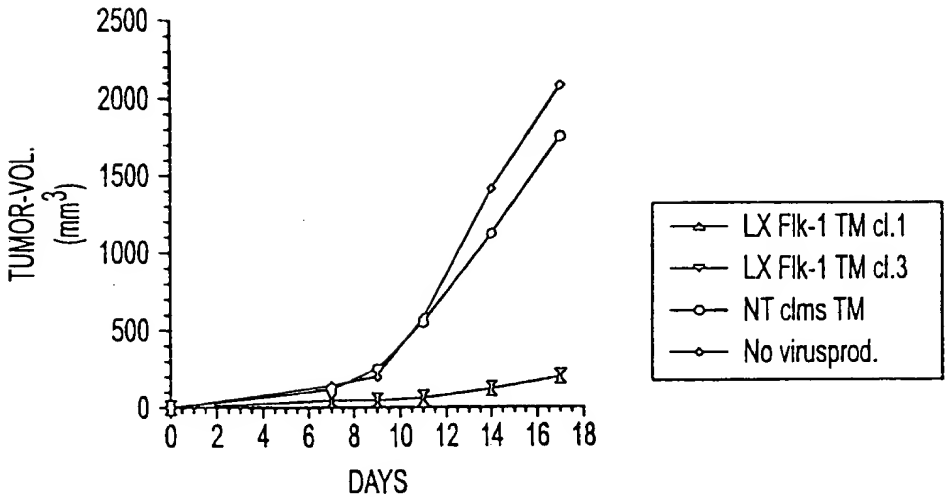

2500
2000
1500
1000
500
0
TUMOR-VOL.
(mm3)
0 2 4 6 8 10 12 14 16 18
DAYS
LX Flk-1 TM cl.1
LX Flk-1 TM cl.3
NT clms TM
No virusprod.

FIG. 14

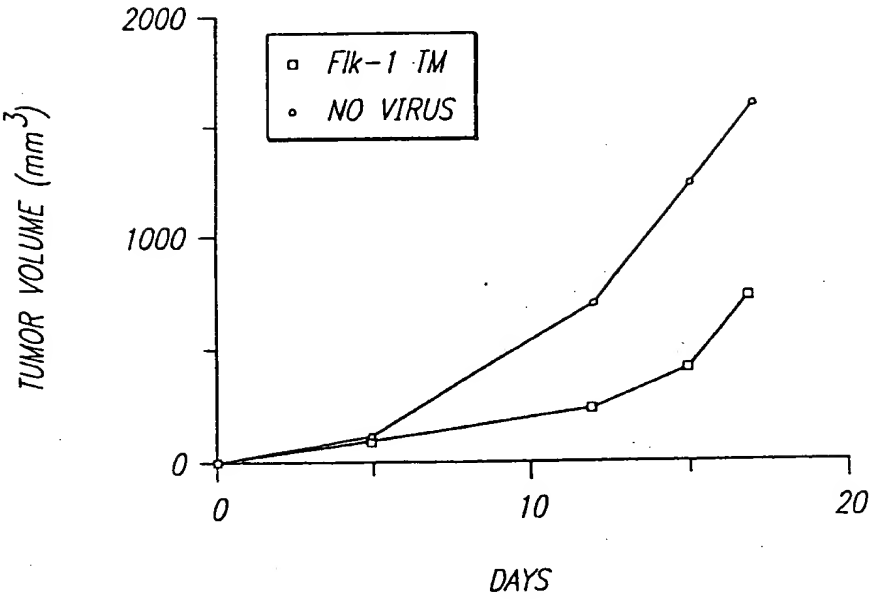

2000
1000
0
TUMOR VOLUME (mm3)
Flk-1 TM
NO VIRUS
0
10
20
DAYS

FIG. 15

FIG. 16A

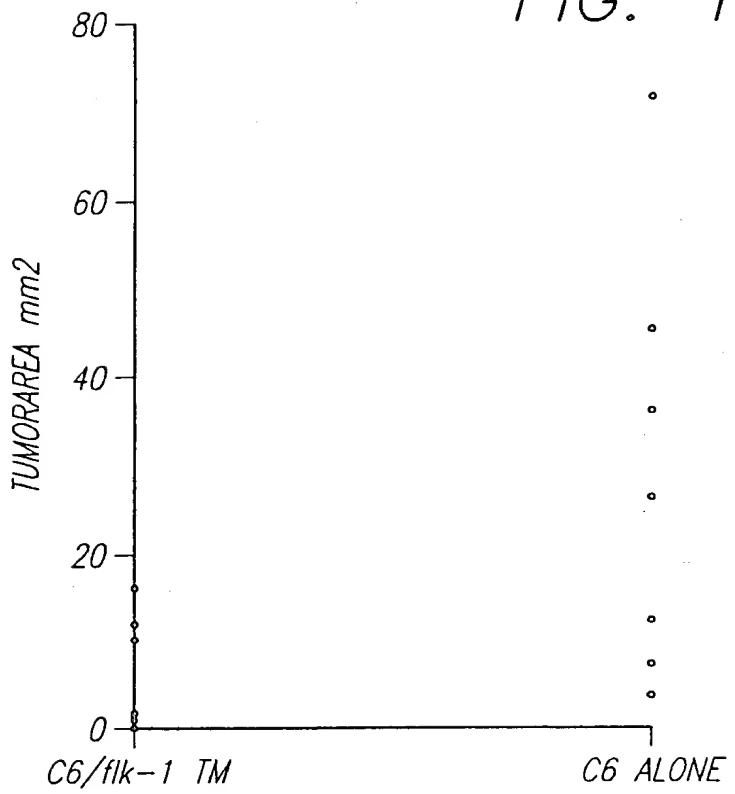


FIG. 16B

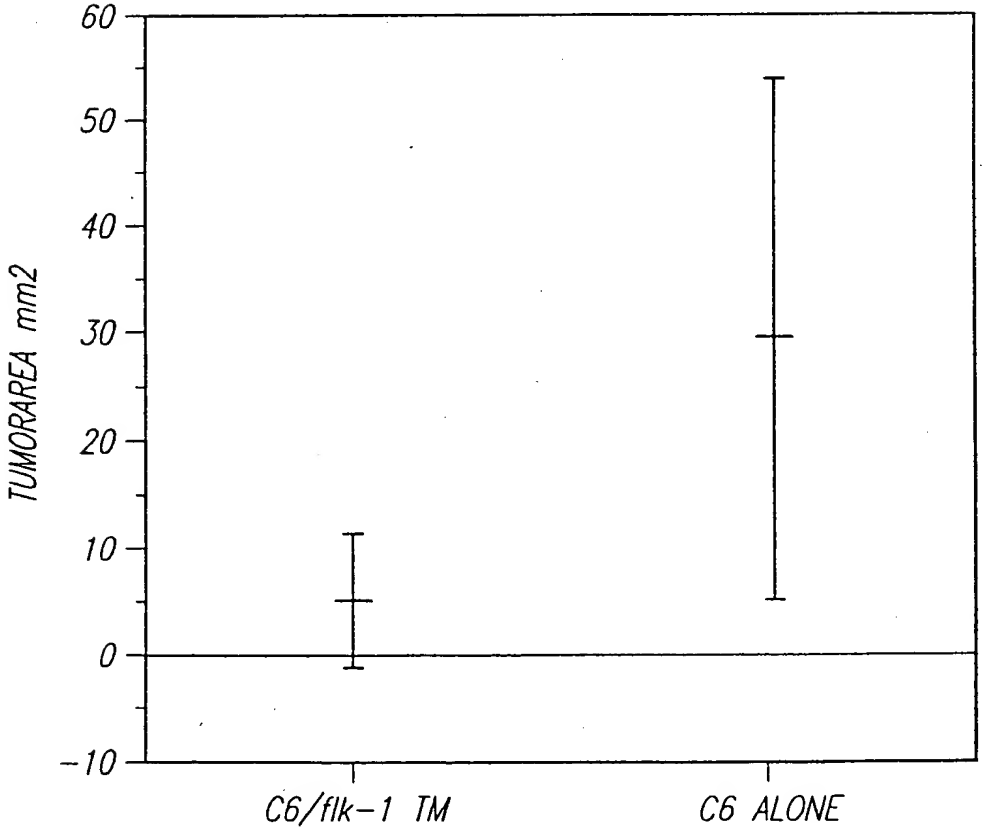
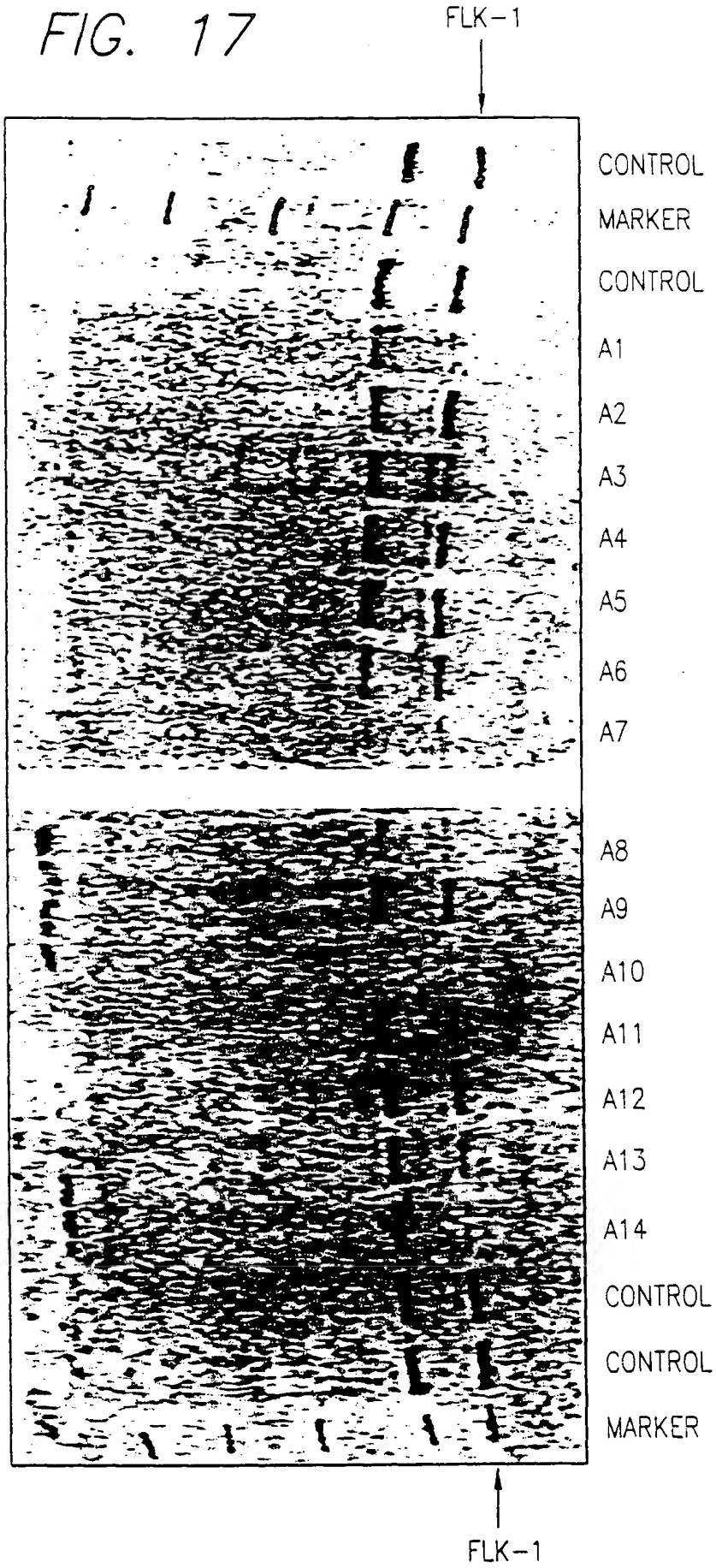


FIG. 17


FLK-1
CONTROL
MARKER
CONTROL
A1
A2
A3
A4
A5
A6
A7
A8
A9
A10
A11
A12
A13
A14
CONTROL
CONTROL
MARKER
FLK-1